REMARKS

This responds to the Office Action dated October 17, 2006.

Claim 2 is amended, no claims are canceled, and no claims are added; as a result, claims 1-35 are now pending of which the Examiner has withdrawn claims 30-32.

Claim 2 is amended to more clearly recite the claimed subject matter and not for purposes of overcoming particular art. No new matter is added by the amendment.

Drawings

The drawings were objected to under 37 CFR 1.83(a). Applicant respectfully submits that the figures are merely schematic illustrations of particular embodiments of the disclosed subject matter. It is understood that a particular symbol appearing in a schematic is merely representative of a specific component or set of components in an actual circuit. Here, the symbol denoted by item 245A in FIG. 2A is understood to present a resistance to current flow. As such, Applicant respectfully submits that the schematic remains a faithful representation of a circuit having, for example, a transistor as well as a resistor or any other such component that introdues a resistance to current flow.

In addition, the specification, at page 5, lines 4-6 makes clear that "termination resistor 245A, in various embodiments, includes a discrete resistive element, a transistor or other active or passive component." Thus, it is believed that the figure satisfies the requirements as to adequate disclosure.

Applicant respectfully requests reconsideration and withdrawl of the objection.

Affirmation of Election

Restriction to one of the following claims was required:

I. Group 1, Claims 1-29 and 33-35.

II. Group II, Claims 30-32.

As provisionally elected by Applicants representative, David Black, on October 11, 2006, Applicant elects to prosecute the invention of Group I, claims 1-29 and 33-35.

The claims of the non-elected invention, claims 30-32 (Group II), were withdrawn by the Examiner. Applicant reserves the right to later file continuations or divisions having claims directed to the non-elected inventions. Applicant offers to cancel, without waiver or disclaimer, the claims of Group II upon receipt of an indication of allowability of the remaining claims.

§112 Rejection of the Claims

Claims 2 and 27 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 2 is amended to more clearly recite the claimed subject matter.

Claim 27 remains as originally presented. Applicant respectfully requests clarification as to any perceived errors and a full opportunity with which to respond.

§103 Rejection of the Claims

Claims 1, 3, 4, 5-11, 21, 22, 23, 26, 28, and 29 were rejected under 35 USC § 103(a) as being unpatentable over Karsh et al. (U.S. 4,641,324) in view of Bukowski et al. (U.S. 4,926,442) further in view of Siegel (U.S. Patent 4,736,391).

Applicant respectfully traverses the rejection and submits that *prima facie* obviousness has not been established. The Office Action asserts that Karsh '324 shows "a unit . . . for generating a feedback signal to the input terminal . . ., and a second amplifier to compare the received signal with a reference potential . . ." Applicant traverses the assertion. Applicant is unable to find, either in Karsh '324 alone or in combination with the other cited art, a teaching or suggestion of a first amplifier to compare the peak amplitude and a first reference potential and generate a feedback signal coupled through a resistance to the input terminal. The Office Action refers to figure 6 of Karsh '324, however, Applicant is unable to find such a connection to an input terminal as asserted by the Examiner. Furthermore, Applicant is unable to find, in the proposed combination, a teaching or suggestion of a second amplifier to compare the received signal and a second reference potential, as recited in claim 1. The Office Action refers to

element 48 of Karsh '324 however it is not clear how this can satisfy the recited claim language in light of the electrical connections depicted in the Karsh '324 figure.

The Office Action refers to Bukowski '442 in asserting that "while the unit for generating the feedback circuit does not include a peak detector and a comparison amplifier, such an arrangement is well known in the art, such as shown in '442 . . . " Applicant respectfully traverses and notes that the Office Action assertion does not faithfully represent the subject matter of claim 1 which recites both a first peak detector and a first amplifier.

The Office Action refers to Karsh '324 and "monitor[ing] the peak to peak amplitude of the input signal" however, figure 6 of Karsh '324 and the corresponding description in column 4 does not appear to support the Office Action assertion.

The Office Action refers to Siegel '391 regarding a resistor in figure 5. Applicant submits that such a component does not meet the recited claim language because, for example it does not appear to be in the context recited in the claim.

The Office Action asserts that "it would have been obvious to one of ordinary skilled in the art to use a resistor in the feedback loop of '324 in order to provide impedance between the feedback signal generator and input." Applicant traverses such an assertion and submits that such reasoning does not meet the requirements of establishing a factual basis and objective evidence in support of the selection and combination of the cited documents in the manner proposed. For example, the Office Action does not provide a reason as to why 'one of skill in the art' would want to include such an impedance and Karsh '324 alone does not provide grounds for considering addition of an impedance.

As to independent claim 8, the Office Action states that "claim . . . 8 . . . reads on the limitations of claim 7 above." Applicant respectfully traverses and notes that claim 8 does not recite a filter as included in claim 7. Nevertheless, the Office Action discussion of claim 7 notes that "'324 shows a filter (figures 6, element 60) coupled to the feedback signal generating circuit of claim 1 including a first amplifier." Applicant traverses the assertion and submits that Karsh '324 figure 6, element 60 identified in the Office Action is not described in a manner consistent with the Office Action assertion.

Furthermore, Applicant is unable to find, in the proposed combination, a teaching or suggestion of a feedback circuit coupled to the feedback output and coupled to the detector input, as recited in claim 8.

In addition, Applicant is unable to find, in the proposed combination, a teaching or suggestion of biasing the input signal with the feedback signal, as recited in claim 21.

In addition, Applicant is unable to find, in the proposed combination, a teaching or suggestion of generating a correction signal based on a peak amplitude in the sampled input signal, as recited in claim 26.

As to dependent claims 3-7, 9-11, 22, 23, 28, and 29, Applicant respectfully submits that each recites elements beyond that of the base claim from which each depends. For at least the reasons presented herein, Applicant requests reconsideration and allowance.

Claims 2, 25, and 27 were rejected under 35 USC § 103(a) as being unpatentable over Karsh '324, Bukowski '442, Siegel '391, further in view of Khorram et al. (U.S. 2004/0190650).

Notwithstanding the amendment of claim 2, Applicant traverses the rejection and submits that *prima facie* obviousness has not been established.

The addition of Khorram '650 does not appear to cure the shortcomings noted above as to independent claims 1, 21, and 26 from which each of claims 2, 25, and 27 depend.

The rejection of claim 1 asserts that Karsh '324 shows a "second amplifier to compare the received signal with a reference potential (element 48)." Applicant notes that Karsh '324 element 48 is coupled to a ground. As such, Applicant submits that Karsh '324 has no need for a voltage divider (as recited in claim 2) and thus, the rejection fails for lack of motivation to combine Karsh '324 and Khorram '650 in the manner proposed.

Further as to dependent claims 2, 25, and 27, Applicant respectfully submits that each recites elements beyond that of the base claim from which each depends. For at least the reasons presented herein, Applicant requests reconsideration and allowance.

Claims 12, 14, and 16-19 were rejected under 35 USC § 103(a) as being unpatentable over Karsh '324, Bukowski '442, Siegel '391, further in view of Lacher (U.S. Patent 4,229,831).

Applicant respectfully traverses the rejection and submits that *prima facie* obviousness has not been established. The proposed combination does not appear to teach or suggest the claimed subject matter. For example, Applicant is unable to find, in the proposed combination, a teaching or suggestion of an output amplifier having a first amplifier input coupled to the primary input terminal and a second amplifier input coupled to a first reference potential, and a primary feedback amplifier having a first primary feedback input coupled to the primary peak output and a second primary feedback input coupled to a second reference potential and having a primary feedback output, and a primary feedback circuit coupled to the primary feedback output and coupled to the primary input terminal, as recited in independent claim 12.

The Office Action appears to rely on Lacher '831 in asserting "a driver having a primary output terminal which is connected to the primary input terminal of the receiver." The cited portion of Lacher '831 appears to refer to a fiber-optic cable and, as such, it appears inconsistent to then rely on official notice to assert a connection using a cable or backplane, as recited in claims 18 and 19.

Claims 14 and 16-19 each recite additional elements beyond the subject matter recited in independent claim 12. For at least the reasons noted earlier as to claim 12, Applicant submits that claims 14 and 16-19 are believed to be in condition for allowance. Notification of allowance is respectfully requested.

Claims 13 and 15 were rejected under 35 USC § 103(a) as being unpatentable over Karsh '324, Bukowski '442, Siegel '391, and Lacher '831, further in view of D'Avello et al. (U.S. 4,462,098).

Applicant respectfully traverses the rejection and submits that *prima facie* obviousness has not been established.

The Office Action appears to rely on Lacher '831 in asserting "a driver having a primary output terminal which is connected to the primary input terminal of the receiver." As such, Applicant submits that the optical coupling of Lacher '831 removes any reason for using a capacitor as recited in claim 13. Furthermore, Applicant is unable to find in the proposed

combination with D'Avello '098, a teaching or suggestion of a capacitor as recited in claims 13 and 15. Merely noting mention of a capacitor does not amount to a teaching or suggestion of the particular subject matter recited in the claims.

In addition, the Office Action asserts that "it would have been obvious to one ordinarily skilled in the art to include a capacitor in the filter of in order to provide buffer." Applicant respectfully traverses and submits that such reasoning does not satisfy the Examiner's burden to set forth objective evidence and reasoning in support of the proposed combination. Here, the concept of 'provid[ing] a buffer' does not appear to explain why one of skill in the art would combine the cited documents in the manner proposed. Indeed, Applicant is unclear as to the importance of a buffer and requests either clarification and a full opportunity with which to respond, or withdrawal of the assertion and rejection.

Reconsideration is respectfully requested.

Claims 33 and 35 were rejected under 35 USC § 103(a) as being unpatentable over Karsh '324, Bukowski '442, Siegel '391, and further in view of Chen (U.S. Patent 6,691,203).

Applicant respectfully traverses the rejection and submits that *prima facie* obviousness has not been established.

The addition of Chen '203 does not appear to cure the shortcomings noted above. As to claim 33, the Office Action asserts that "it would have been obvious to one ordinarily skilled in the art to use a RISC with the system described in the references in order to simplify the system." Applicant traverses and submits that such reasoning does not explain the selection and combining of Chen '203 in the manner proposed. Indeed, if one of ordinary skill in the art were to pursue simplification as asserted by the Office Action, it seems implausible that such a worker would consider adding a component. Nevertheless, the Office Action does not set forth objection evidence and factual grounds for the selection and combining of Chen '203 in the manner proposed.

As to claim 35, Applicant notes the absence of any ground for motivation. As such, Applicant submits that the rejection is improper.

Applicant is unclear as to the status of claim 34. The Office Action refers to claim 34 in a portion near the treatment of claims 33 and 35 however, the Office Action does not appear to properly state a rejection for claim 34.

Reconsideration and allowance of claim 33, claim 34 and claim 35 is respectfully requested.

Allowable Subject Matter

Claims 20 and 24 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant respectfully submits that independent claims 12 and 21 recite patentable subject matter for at least the reasons presented herein. Claims 20 and 24 are based on claims believed to be in condition for allowance. Reconsideration and allowance of claims 20 and 24 is respectfully requested.

Reservation of Rights

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of

priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((612) 373-6911) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

KARL H. MAURITZ ET AL.

By their Representatives,
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
Attorneys for Intel Corporation
P.O. Box 2938
Minneapolis, Minnesota 55402
(612) 373-6911

Date December 21, 2006 By _____
David W. Black
Reg. No. 42,331

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 21st day of December 2006.

Amy Moriarty
Name

_____
Signature

IN THE DRAWINGS

Corrected drawings are supplied herewith, each labeled as "REPLACEMENT SHEET". The Replacement Sheets are believed to faithfully depict the figures that were provided with the originially filed application.